



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-9 series  
 UNIQUE ID NUMBER: 1PW007  
 COMBUSTOR: Reduced emissions  
 ENGINE TYPE: MTF

BYPASS RATIO: 1.0  
 PRESSURE RATIO ( $\pi_{00}$ ): 15.9  
 RATED THRUST ( $F_{00}$ ) (kN): 64.5

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	14.4	57.2	59.6	11.8
AS % OF ORIGINAL LIMIT	73.7	48.5	83.1	44.4
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			103.8	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			120.2	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			128.8	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			149.8	

### DATA STATUS

- PRE-REGULATION  
 x CERTIFICATION  
 - REVISED (SEE REMARKS)

### TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES  
 x DEDICATED ENGINES TO PRODUCTION STANDARD  
 - OTHER (SEE REMARKS)

### EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
 (ANNEX 16 VOLUME II)

### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
 x OUT OF PRODUCTION (DATE: - )  
 - OUT OF SERVICE (DATE: - )

### MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	1.040	0.15	1.04	19.30	10.1
CLIMB OUT	85	2.2	0.845	0.18	1.11	14.50	
APPROACH	30	4.0	0.298	0.60	2.14	6.00	
IDLE	7	26.0	0.132	3.12	14.14	2.90	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			433	713	3241	3488	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				7	7	4	4
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				11.1	50.2	54.2	10.1
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							

### ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS  
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	
TEMPERATURE (K)	270-311
ABS HUMIDITY (kg/kg)	

### FUEL

SPEC	Jet A
H/C	
AROM (%)	

MANUFACTURER: Pratt & Whitney  
 TEST ORGANIZATION: P&WA  
 TEST LOCATION: East Hartford, CT  
 TEST DATES: 26/02/1980-18/06/1980

### REMARKS

1. Reduced Emissions Combustor incorporated 1/1/84.
2. Applicable to JT8D-9, -9A.

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)